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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,627	08/31/2000	Kevin C. Schramm	BFGHP0265US	4345

7590 02/06/2004

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EXAMINER

JEFFERY, JOHN A

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 02/06/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

CLD 19

Office Action Summary

Applicati n N .

09/652,627

Applicant(s)

SCHRAMM, KEVIN C.

Examiner

John A. Jeffery

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-- The MAILING DATE f this communication appears on the cover sheet with the correspond nce address --

Peri d for R ply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 19-28 is/are pending in the application.
- 4a) Of the above claim(s) 11-15 and 26-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 19-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing R view (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Withdrawal of Final Rejection--Newly Discovered Prior Art

The examiner has carefully considered applicant's arguments asserted in the appeal brief filed 1/24/03. Upon further reconsideration and an updated search, the examiner has entered a new grounds of rejection based on newly-discovered prior art. The examiner regrets the delay in citing the newly-found prior art. The finality of the previous office action is hereby withdrawn and prosecution reopened.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-3, 6, 7, 9, 10, and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Hillinger (US 4,606,959).

Applicant in the "Background of the Invention" section of the instant specification admits that heated aircraft floor panels formed from cured composites comprising a lower support level and an upper heater level are known in the art. Specification, Page 1,

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lines 7-27. Moreover, applicant notes that it is known to adhesively bond a metal face sheet to the top of the heater and underlying panel. *Id.*

The claims differ from the admitted prior art in calling for adhesively bonding the metal face sheet to the composite via a pressure-sensitive adhesive. But bonding protective sheets to honeycomb composite panels with pressure-sensitive adhesives is well known in the art. Hillinger (US 4,606,959), for example, discloses bonding a face sheet 18 to a honeycomb composite panel with pressure-sensitive adhesive. According to col. 4, lines 13-25 and col. 6, lines 22-27, the face sheet adds significant strength and rigidity to the panel such that it can withstand impact. As noted in col. 3, line 58 - col. 4, line 3, pressure-sensitive adhesives are preferred since such adhesives (1) can be applied at room temperature; (2) aggressively adhere to the structure's surfaces; and (3) will not cause damage to the structure during adhesion. Moreover, as noted in col. 3, lines 38-44, although able to be applied at room temperature, pressure-sensitive adhesives are also able to withstand elevated temperatures. In view of Hillinger (US 4,606,959), it would have been obvious to one of ordinary skill in the art to use a pressure-sensitive adhesive for the face sheet in lieu of the admitted prior art heating panel adhesive to use an adhesive that (1) can be applied at room temperature; (2) aggressively adheres to the structure's surfaces; and (3) will not cause damage to the structure.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Hillinger (US 4,606,959) and further in view of

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Stirzenbecher (US 3,697,728). The claims differ from the previously cited prior art in calling for the face sheet to be made of metal. But providing metal face sheets for electrically-heated honeycomb floor panels for aircraft floors is conventional and well known in the art as evidenced by Stirzenbecher (US 3,697,728) noting aluminum plate 14 adhesively-bonded to the underlying panel structure. See col. 7, lines 18-38 and Fig. 1. The plate's hard metallic surface protects the underlying honeycomb panel and electric heater from surface impacts. Although the PVC material of Hillinger's face plate is designed to protect the underlying panel from impact damage, a metal plate such as that disclosed by Stirzenbecher (US 3,697,728) would further protect the underlying panel structure in view of metal's increased strength, durability, and hardness as compared to PVC. In view of Stirzenbecher (US 3,697,728), it would have been obvious to one of ordinary skill in the art to provide a metal face plate in lieu of the PVC plate of Hillinger (US 4,606,959) so that a stronger and harder face plate was used to protect the underlying heater and honeycomb composite panel from damage.

Claims 8 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of Hillinger (US 4,606,959) and further in view of Arisawa (US 4,804,569). The claims differ from the previously cited prior art in calling for the pressure-sensitive adhesive to be a rubber adhesive. But using rubber-based pressure-sensitive adhesives in lieu of acrylic-based adhesives is well known in the art. Arisawa (US 4,804,569), for example, teaches applying either a rubber-based pressure-sensitive adhesive or an acrylic-based adhesive on a tile applied to an underlying

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substrate for protection. As is well-known in the art, rubber-based pressure-sensitive adhesives are more flexible than other types of adhesives. In view of Arisawa (US 4,804,569), it would have been obvious to one of ordinary skill in the art to provide a rubber-based pressure-sensitive adhesive in lieu of the pressure-sensitive adhesive of the previously described apparatus to increase flexibility of the adhered joint.

Response to Arguments

Applicant's arguments have been considered but are deemed to be moot in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Jeffery whose telephone number is (703) 306-4601. The examiner can normally be reached on Monday - Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg, can be reached on (703) 308-2634. All faxes should be sent to the centralized fax number at (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

A handwritten signature in black ink, appearing to read "John A. Jeffery". The signature is fluid and cursive, with a long horizontal stroke at the end.

**JOHN A. JEFFERY
PRIMARY EXAMINER**

2/4/04